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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,787	03/26/2004	Alan C. Wendt	920095-95446	9635

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EXAMINER

PHILLIPS, FORREST M

ART UNIT PAPER NUMBER

2837

DATE MAILED: 08/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/810,787

Applicant(s)

WENDT ET AL.

Examiner

Forrest M. Phillips

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2004-03-26</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1,3-4,6, 8-9, 11-13 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (US2002/0117351) in view of Saylor et al (US 4084367).

With respect to claim 1 Chen discloses a durable sound absorbing panel (10 in figure 1) having surface burning resistance qualities for use in a structure having a useable area, the panel comprising:

A panel substrate (11 in figure 1) having a first face and a second face, the second face opposing the first face and substantially concealed from the environmental area when installed; the panel substrate, supportable from a structure, the panel substrate including a plurality of apertures (17 in figure 1) spread across the surface of the panel substrate.

Chen does not explicitly disclose a non-woven material attached to the first face of the panel substrate and applied such that the apertures are covered by the non-woven fibrous material; the non-woven fibrous material is positioned such that nearly complete exposure of the material occurs when installed, permitting viewing from the environmental area of the structure.

Saylor discloses a panel (112 in figure 8) in which a non-woven fibrous material (141 in figure 8) is attached to a first face of a panel and applied such that the apertures (138 and 138a in figure 9) are covered by the non-woven fibrous material; the non-woven fibrous material is positioned such that nearly complete exposure of the material occurs when installed, permitting viewing from the environmental area of the structure (figure 8 all but very edges of 41 are visible).

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Saylor to have a panel substrate with a plurality of apertures covered by a non-woven fibrous layer with the panel of Chen to provide the panel with a decorative appearance (column 6 lines 52-56 of Saylor).

With respect to claim 3 Saylor teaches wherein the apertures include a first group having a first size (138 in figure 8) and a second group having a different size (138a in figure 8).

With respect to claim 4 Chen in view of Saylor discloses the claimed invention except for wherein the apertures have sizes ranging from about 0.039 inches to about 0.117 inches. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the "tiny holes" of Chen be within the range of 0.039 inches to about .117 inches, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimal or working ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

With respect to claim 6 Chen in view of Saylor discloses the claimed invention except for wherein the airflow rate resistance through the non-woven fibrous materials is about 100 mks rays to about 600 mks rays.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the airflow resistance of the non-woven fibrous material be within the range of about 100mks rays to about 600 mks rays, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimal or working ranges involves only routine skill in the art.

With respect to claim 8 Saylor discloses multiple groups of apertures having multiple different sizes, (138 and 138 a respectively as mentioned in above claims) and goes on to specify at least two different sizes (column 4 lines 27).

At the time of the invention it would have been obvious to one of ordinary skill in the art to have as many groups greater than or equal to two of differing sized apertures in view of the teachings of Saylor.

The motivation for doing so would have been to attenuate an even greater number of frequencies of sound.

With respect to claim 9 Chen discloses an interior finishing panel for use in a building structure comprising: a semi-rigid panel substrate (11 in figure 1) adapted to be supported by its edges with minimal panel substrate flex, the panel substrate having a first face and a second face opposing the first face, the second face being substantially concealed when the finishing panel is installed within the building structure; a first set of apertures (17 in figure 1) in the panel substrate (11 in figure 1) having a first size.

Chen does not explicitly disclose a non-woven material attached to the first face of the panel substrate and applied such that the apertures are covered by the non-woven fibrous material; the non-woven fibrous material is positioned such that nearly complete exposure of the material occurs when installed, permitting viewing from the environmental area of the structure.

Saylor discloses a panel (112 in figure 8) in which a non-woven fibrous material (141 in figure 8) is attached to a first face of a panel and applied such that the apertures (138 and 138a in figure 9) are covered by the non-woven fibrous material; the non-woven fibrous material is positioned such that nearly complete exposure of the material occurs when installed, permitting viewing from the environmental area of the structure (figure 8 all but very edges of 41 are visible).

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Saylor to have a panel substrate with a plurality of apertures covered by a non-woven fibrous layer with the panel of Chen to provide the panel with a decorative appearance (column 6 lines 52-56 of Saylor).

With respect to claim 11 Chen in view of Saylor discloses the claimed invention except for wherein the apertures have sizes ranging from about 0.039 inches to about 0.117 inches. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the "tiny holes" of Chen be within the range of 0.039 inches to about .117 inches, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimal or working ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

With respect to claim 13 Chen in view of Saylor discloses the claimed invention except for wherein the airflow rate resistance through the non-woven fibrous materials is about 100 mks rays to about 600 mks rays.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the airflow resistance of the non-woven fibrous material be within the range of about 100mks rays to about 600 mks rays, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimal or working ranges involves only routine skill in the art.

With respect to claim 15 Saylor discloses wherein the panel includes a second set of apertures (138a in figure 8) formed on the panel substrate having a second size.

With respect to claim 16 Saylor discloses multiple groups of apertures having multiple different sizes, (138 and 138 a respectively as mentioned in above claims) and goes on to specify at least two different sizes (column 4 lines 27).

At the time of the invention it would have been obvious to one of ordinary skill in the art to have as many groups greater than or equal to two of differing sized apertures in view of the teachings of Saylor.

The motivation for doing so would have been to attenuate an even greater number of frequencies of sound.

2. Claims 2,5, 10, 12, 17-21 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Saylor as applied to claim1 above, and further in view of Daniels (US3712846).

With respect to claim 2 Chen in view of Saylor discloses the panel of claim 1.

Chen in view of Saylor does not disclose explicitly wherein the non-woven fibrous material is attached to the first face of the panel substrate with an adhesive.

Daniels discloses the use of an adhesive to bond an outer covering (30 in figure 5) to a perforate member (35 in figure 5).

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Daniels to use an adhesive to attach an outer member to a perforate member with the panel of Chen in view of Saylor.

The motivation for doing so would have been to prevent the non-woven material from sagging due to gravity.

With respect to claim 5 Chen in view of Saylor in further view of Daniels discloses the claimed invention except for wherein the airflow rate resistance through the panel is about 900 mks rays to about 1050 mks rays, it is believed by examiner the airflow resistance would be the same because the open area in both panels is approximately the same range of about 30%.

With respect to claim 10 Chen in view of Saylor discloses the panel of claim 9.

Chen in view of Saylor does not disclose explicitly wherein the non-woven fibrous material is attached to the first face of the panel substrate with an adhesive.

Daniels discloses the use of an adhesive to bond an outer covering (30 in figure 5) to a perforate member (35 in figure 5).

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At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Daniels to use an adhesive to attach an outer member to a perforate member with the panel of Chen in view of Saylor.

The motivation for doing so would have been to prevent the non-woven material from sagging due to gravity.

With respect to claim 12 Chen in view of Saylor in further view of Daniels discloses the claimed invention except for wherein the airflow rate resistance through the panel is about 900 mks rays to about 1050 mks rays it is believed by examiner the airflow resistance would be the same because the open area in both panels is approximately the same range of about 30%.

With respect to claim 17 Chen discloses an interior finishing panel for use in a building structure comprising; a semi-rigid panel substrate (11 in figure 1) having an exterior face and an interior face, opposing the exterior face, the interior face is adapted to be substantially concealed when the panel is installed in the building structure; a plurality of apertures (17 in figure 1) having a first size passing through the panel substrate and extending across the faces.

Chen does not disclose expressly a non-woven fibrous material adhered to the exterior face of the panel substrate, and positioned to cover the apertures, the fibrous material is adapted to be substantially visible when the panel is installed in the building structure.

Saylor discloses a panel having a panel substrate with a plurality of apertures having a first size and a non-woven fibrous material (141 in figure 8) positioned to cover

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the apertures, the fibrous material is adapted to be substantially visible when the panel is installed in the building structure.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the non-woven fibrous material covering the apertures as taught by Saylor with the panel of Chen to provide a decorative appearance to the panel.

Chen in view of Saylor does not disclose wherein the non-woven fibrous material is adhered to the exterior face of the panel.

Daniels discloses the use of an adhesive to bond an outer covering (30 in figure 5) to a perforate member (35 in figure 5).

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Daniels to use an adhesive to attach an outer member to a perforate member with the panel of Chen in view of Saylor.

The motivation for doing so would have been to prevent the non-woven material from sagging due to gravity.

With respect to claim 18 Daniels further discloses wherein the non-woven fibrous material is attached to the exterior face of the panel with an adhesive.

With respect to claim 19 Chen in view of Saylor in further view of Daniels discloses the claimed invention except for wherein the apertures have sizes ranging from about 0.039 inches to about 0.117 inches. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the "tiny holes" of Chen be within the range of 0.039 inches to about .117 inches, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering

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the optimal or working ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

With respect to claim 20 Chen in view of Saylor in further view of Daniels discloses the claimed invention except for wherein the airflow rate resistance through the panel is about 900 mks rays to about 1050 mks rays it is believed by examiner the airflow resistance would be the same because the open area in both panels is approximately the same range of about 30%.

With respect to claim 21 Chen in view of Saylor in further view of Daniels discloses the claimed invention except for wherein the airflow rate resistance through the non-woven fibrous materials is about 100 mks rays to about 600 mks rays.

With respect to claim 23 Saylor further discloses wherein the panel includes a second set of apertures (138a in figure 8) passing through the panel substrate having a second size.

With respect to claim 24 Saylor discloses multiple groups of apertures having multiple different sizes, (138 and 138 a respectively as mentioned in above claims) and goes on to specify at least two different sizes (column 4 lines 27).

At the time of the invention it would have been obvious to one of ordinary skill in the art to have as many groups greater than or equal to two of differing sized apertures in view of the teachings of Saylor.

The motivation for doing so would have been to attenuate an even greater number of frequencies of sound.

3. Claims 7, 14, 25, 27-28, and 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Saylor as applied to claim 1 above, and further in view of Wendt (US6467228).

With respect to claim 7 Chen in view of Saylor discloses the sound absorbing and surface burn resistant panel of claim 1.

Chen in view of Saylor does not disclose wherein the panel includes at least two side edges each having a flange for connection to a suspended ceiling grid wherein the suspended ceiling grid includes a plurality of grid members interconnected to form panel openings, the grid members suspended from the structure with hangers.

Wendt discloses at least two side edges (27 and 29 in figure 1) each having a flange (26 and 28 in figure 1) for connection to a suspended ceiling grid wherein the suspended ceiling grid includes a plurality of grid members interconnected to form panel openings, the grid members suspended from the structure with hangers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the flanged edges of Wendt with the panel of Chen in view of Saylor to provide ease of repositioning the panel (abstract of Wendt).

With respect to claim 14 Chen in view of Saylor discloses the sound absorbing and surface burn resistant panel of claim 9.

Chen in view of Saylor does not disclose wherein the panel includes at least two side edges each having a flange for connection to a suspended ceiling grid wherein the

suspended ceiling grid includes a plurality of grid members interconnected to form panel openings, the grid members suspended from the structure with hangers.

Wendt discloses at least two side edges (27 and 29 in figure 1) each having a flange (26 and 28 in figure 1) for connection to a suspended ceiling grid wherein the suspended ceiling grid includes a plurality of grid members interconnected to form panel openings, the grid members suspended from the structure with hangers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the flanged edges of Wendt with the panel of Chen in view of Saylor to provide ease of repositioning the panel (abstract of Wendt).

With respect to claim 25 Chen discloses a panel substrate having a first face and a second face, the second face opposing the first face and substantially concealed from the environmental area when installed; the panel substrate (11 in figure 1) including a plurality of apertures (17 in figure 1) spread across the surface of the panel substrate.

Saylor discloses a non-woven fibrous material (141 in figure 8) attached to the first face of the panel substrate and applied such that the apertures (138 and 138a in figure 8) are covered by the non-woven fibrous material; the non-woven fibrous material is positioned such that nearly complete exposure of the material occurs when installed, permitting viewing from the environmental area of the structure.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Saylor to have a non-woven fibrous material cover the apertures of the panel of Chen to provide the panel with a decorative appearance (column 6 lines 52-56 of Saylor).

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Wendt discloses a plurality of grid member interconnected to form a grid; the grid members adapted to be suspended from the structure, and panels supportable from the grid (figure1).

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Wendt with the panel of Chen in view of Saylor to provide a means of installing and using the panel

With respect to claim 27 Saylor further discloses wherein the apertures include a first group (138 in figure 8) having a first size and a second group (138a in figure 8) having a second size.

With respect to claim 28 Chen in view of Saylor in further view of Wendt discloses the claimed invention except for wherein the apertures have sizes ranging from about 0.039 inches to about 0.117 inches. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the "tiny holes" of Chen be within the range of 0.039 inches to about .117 inches, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimal or working ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

With respect to claim 30 Chen in view of Saylor in further view of Wendt discloses the claimed invention except for wherein the airflow rate resistance through the non-woven fibrous materials is about 100 mks rays to about 600 mks rays.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the airflow resistance of the non-woven fibrous material be within the range of about 100mks rays to about 600 mks rays, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimal or working ranges involves only routine skill in the art.

With respect to claim 31 Wendt further discloses wherein the panel includes at least two side edges (27 and 29 in figure 1) each having a flange (26 and 28 in figure 1) for connection to a suspended ceiling grid wherein the suspended ceiling grid includes a plurality of grid members interconnected to form panel openings, the grid members suspended from the structure with hangers.

With respect to claim 32 Saylor discloses multiple groups of apertures having multiple different sizes, (138 and 138 a respectively as mentioned in above claims) and goes on to specify at least two different sizes (column 4 lines 27).

At the time of the invention it would have been obvious to one of ordinary skill in the art to have as many groups greater than or equal to two of differing sized apertures in view of the teachings of Saylor.

The motivation for doing so would have been to attenuate an even greater number of frequencies of sound.

With respect to claim 33 Chen further discloses wherein the second face includes a layer of porous insulation material (12 in figure 1).

With respect to claim 34 Chen further discloses wherein the apertures are selected form a group consisting of circular, square, triangular, rectangular and oval (see figure 1).

4. Claims 22 and 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Saylor in further view of Daniels as applied to claim 17 above, and further in view of Wendt (US6467228).

With respect to claim 22 Chen in view of Saylor in further view of Daniels discloses the panel of claim 17.

Chen in view of Saylor in further view of Daniels does not disclose wherein the panel includes at least two side edges each having a flange for connection to a ceiling grid, wherein the suspended ceiling grid includes a plurality of grid members interconnected to form panel openings, the grid members suspended form the structure with hangers.

Wendt discloses wherein the panel includes at least two side edges (27 and 29 in figure 1) each having a flange (26 and 28 in figure 1) for connection to a ceiling grid, wherein the suspended ceiling grid includes a plurality of grid members interconnected to form panel openings, the grid members suspended form the structure with hangers.

With respect to claim 26 Chen in view of Saylor in further view of Wendt discloses the system of claim 25.

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Chen in view of Saylor in further view of Wendt does not disclose wherein the non-woven fibrous material is attached to the first face of the panel substrate with an adhesive.

Daniels discloses wherein a non-woven fibrous material (30 in figure 5) is attached to a perforate member (35 in figure 5) using adhesive.

With respect to claim 29 Chen in view of Saylor in view of Wendt in further view of Daniels discloses the claimed invention except for wherein the airflow rate resistance through the panel is about 900 mks rays to about 1050 mks rays it is believed by examiner the airflow resistance would be the same because the open area in both panels is approximately the same range of about 30%.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sabine (US2838806); and Kanengeiser (US2076994).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Forrest M. Phillips whose telephone number is 5712729020. The examiner can normally be reached on Monday through Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 5712721988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FP



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